

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	US-5072027-\$.DID.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 08:32
L2	233	560/217.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 08:33
L3	17323	azeotrope	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 08:33
L4	44	I2 and I3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:03
L5	1	("6147252").URPN.	USPAT	OR	ON	2005/05/24 08:53
L6	1512358	continuous	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:03
L7	295	"I44" and I6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:04
L8	13	I4 and I6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:10
L9	16	"8701337"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:18
L10	2	"6147242".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:19
L11	2	"6147252".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:20
L12	2	"2916512".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 09:20
L13	2	"3686268".PN.	USPAT; USOCR	OR	ON	2005/05/24 09:24

L14	1	"4202990".PN.	USPAT; USOCR	OR	ON	2005/05/24 09:27
L15	8	("3686268").URPN.	USPAT	OR	ON	2005/05/24 10:47
L16	29678	butyl adj acrylate	USPAT	OR	ON	2005/05/24 10:47
L17	3524	film adj evaporator	USPAT	OR	ON	2005/05/24 10:48
L18	194	I16 and I17	USPAT	OR	ON	2005/05/24 10:48
L19	6	I16 same I17	USPAT	OR	ON	2005/05/24 10:48
L20	761	tetraalkyl adj titanate	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 13:34
L21	5	I2 and I20	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 13:38
L22	14737	polymerization adj inhibitor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 13:38
L23	26	I20 and I22	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/24 13:39

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	2	US-5072027-\$.DID.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 08:32
2	BRS	L2	233	560/217.ccls.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 08:33
3	BRS	L3	17323	azeotrope	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 08:33
4	BRS	L4	44	12 and 13	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:03
5	BRS	L5	1	("6147252").URPN.	USPAT	2005/05/24 08:53
6	BRS	L6	151235 8	continuous	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:03

	Comments	Error Definition	Errors
1			
2			
3			
4			
5			
6			

	Type	L #	Hits	Search Text	DBs	Time Stamp
7	BRS	L7	295	"144" and 16	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:04
8	BRS	L8	13	14 and 16	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:10
9	BRS	L9	16	"8701337"	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:18
10	BRS	L10	2	"6147242".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:19
11	BRS	L11	2	"6147252".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:20

	Comments	Error Definition	Errors
7			
8			
9			
10			
11			

	Type	L #	Hits	Search Text	DBs	Time Stamp
12	BRS	L12	2	"2916512".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 09:20
13	BRS	L13	2	"3686268".PN.	USPAT; USOCR	2005/05/24 09:24
14	BRS	L14	1	"4202990".PN.	USPAT; USOCR	2005/05/24 09:27
15	BRS	L15	8	("3686268").URPN.	USPAT	2005/05/24 10:47
16	BRS	L16	29678	butyl adj acrylate	USPAT	2005/05/24 10:47
17	BRS	L17	3524	film adj evaporator	USPAT	2005/05/24 10:48
18	BRS	L18	194	l16 and l17	USPAT	2005/05/24 10:48
19	BRS	L19	6	l16 same l17	USPAT	2005/05/24 10:48
20	BRS	L20	761	tetraalkyl adj titanate	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 13:34
21	BRS	L21	5	l2 and l20	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 13:38

	Comments	Error Definition	Errors
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			



	Type	L #	Hits	Search Text	DBs	Time Stamp
22	BRS	L22	14737	polymerization adj inhibitor	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 13:38
23	BRS	L23	26	120 and 122	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/05/24 13:39

	Comments	Error Definition	Errors
22			
23			

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	4	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	5	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	6	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	7	MAR 02	GBFULL: New full-text patent database on STN
NEWS	8	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	9	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	10	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	11	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	12	MAR 22	PATDPASPC - New patent database available
NEWS	13	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	14	APR 04	EPPFULL enhanced with additional patent information and new fields
NEWS	15	APR 04	EMBASE - Database reloaded and enhanced
NEWS	16	APR 18	New CAS Information Use Policies available online
NEWS	17	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	18	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS
NEWS	19	MAY 23	GBFULL enhanced with patent drawing images
NEWS	20	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:58:46 ON 24 MAY 2005

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 09:58:56 ON 24 MAY 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 May 2005 VOL 142 ISS 22  
FILE LAST UPDATED: 23 May 2005 (20050523/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> acrylate  
169703 ACRYLATE  
33424 ACRYLATES  
L1 178665 ACRYLATE  
(ACRYLATE OR ACRYLATES)

=> tranesterif?  
L2 37 TRANESTERIF?

=> transesterif?  
L3 20166 TRANSESTERIF?

=> l1 and l3  
L4 1055 L1 AND L3

=> azeotrop?  
L5 23416 AZEOTROP?

=> l4 and l5  
L6 86 L4 AND L5

=> continu?  
L7 752134 CONTINU?

=> l6 and l7  
L8 7 L6 AND L7

=> d l8 1-7 ti

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
TI **Transesterification** procedure for the **continuous**  
production of alkyl (meth)**acrylates** from methyl (meth)  
**acrylates** with repeated catalyst recycling

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI **Transesterification** process for the **continuous**  
 manufacture of 2-(dimethylamino)ethyl **acrylate** from ethyl  
**acrylate** and 2-(dimethylamino)-1-ethanol

L8 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI **Transesterification** method for the **continuous**  
 production of alkyl (meth)**acrylates** from alcohols and methyl  
 (meth)**acrylates**

L8 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Curable composition containing epoxy and vinyl modified polyester

L8 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Polymers of vinylidioxolanylalkyl methacrylates for coatings

L8 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Wood's metal as a polymerization inhibitor in the  
**transesterification** of **acrylate** esters

L8 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Base-catalyzed reaction of 2-alkylaminoethanols with acrylic and  
 methacrylic esters

=> d l8 1-3,6 and 7 ti fbib abs  
 'AND' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB  
 ALL ----- BIB, AB, IND, RE  
 APPS ----- AI, PRAI  
 BIB ----- AN, plus Bibliographic Data and PI table (default)  
 CAN ----- List of CA abstract numbers without answer numbers  
 CBIB ----- AN, plus Compressed Bibliographic Data  
 DALL ----- ALL, delimited (end of each field identified)  
 DMAX ----- MAX, delimited for post-processing  
 FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM  
 IND ----- Indexing data  
 IPC ----- International Patent Classifications  
 MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT  
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
 SCAN must be entered on the same line as the DISPLAY,  
 e.g., D SCAN or DISPLAY SCAN)  
 STD ----- BIB, IPC, and NCL

IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)

containing hit terms

HITRN ----- HIT RN and its text modification

HITSTR ----- HIT RN, its text modification, its CA index name, and its structure diagram

HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields

FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram

FHITSEQ ----- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields

KWIC ----- Hit term plus 20 words on either side

OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):ende

'ENDE' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB

ALL ----- BIB, AB, IND, RE

APPS ----- AI, PRAI

BIB ----- AN, plus Bibliographic Data and PI table (default)

CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data

DALL ----- ALL, delimited (end of each field identified)

DMAX ----- MAX, delimited for post-processing

FAM ----- AN, PI and PRAI in table, plus Patent Family data

FBIB ----- AN, BIB, plus Patent FAM

IND ----- Indexing data

IPC ----- International Patent Classifications

MAX ----- ALL, plus Patent FAM, RE

PATS ----- PI, SO

SAM ----- CC, SX, TI, ST, IT

SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN)

STD ----- BIB, IPC, and NCL

IABS ----- ABS, indented with text labels

IALL ----- ALL, indented with text labels

IBIB ----- BIB, indented with text labels

IMAX ----- MAX, indented with text labels

ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations

SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms

HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms

HITRN ----- HIT RN and its text modification

HITSTR ----- HIT RN, its text modification, its CA index name, and

its structure diagram  
HITSEQ ----- HIT RN, its text modification, its CA index name, its  
structure diagram, plus NTE and SEQ fields  
FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
its structure diagram  
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
structure diagram, plus NTE and SEQ fields  
KWIC ----- Hit term plus 20 words on either side  
OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field  
codes. For a list of the display field codes, enter HELP DFIELDS at  
an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST;  
TI,IND; TI,SO. You may specify the format fields in any order and the  
information will be displayed in the same order as the format  
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,  
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC  
to view a specified Accession Number.  
ENTER DISPLAY FORMAT (BIB):end

=> d l8 1-3,6,7 ti fbib abs

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
TI **Transesterification** procedure for the **continuous**  
production of alkyl (meth)**acrylates** from methyl (meth)  
**acrylates** with repeated catalyst recycling

AN 2004:587918 CAPLUS  
DN 141:124115

TI **Transesterification** procedure for the **continuous**  
production of alkyl (meth)**acrylates** from methyl (meth)  
**acrylates** with repeated catalyst recycling

IN Ackermann, Jochen; Hiltner, Horst; Siegert, Hermann  
PA Roehm GmbH & Co. KG, Germany  
SO Ger. Offen., 16 pp.  
CODEN: GWXXBX

DT Patent  
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10301007	A1	20040722	DE 2003-10301007	20030113
	WO 2004063140	A1	20040729	WO 2003-EP13060	20031121
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				DE 2003-10301007	A 20030113

OS MARPAT 141:124115

AB An procedure for the **continuous** production of alkyl (meth)  
**acrylates** (e.g., iso-Bu methacrylate) by the **continuous**  
catalytic **transesterification** of Me (meth)**acrylates**  
with high-boiling alcs. (e.g., isobutanol) is described. A very high  
space-time velocity and product yield can be achieved. This process  
enables the reuse of homogeneous **transesterification** catalyst  
several times and thus reduces the excipient costs; process flow diagrams  
are presented.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
TI **Transesterification** process for the **continuous**  
manufacture of 2-(dimethylamino)ethyl **acrylate** from ethyl  
**acrylate** and 2-(dimethylamino)-1-ethanol

AN 2003:859416 CAPLUS

DN 139:338322

TI **Transesterification** process for the **continuous**  
manufacture of 2-(dimethylamino)ethyl **acrylate** from ethyl  
**acrylate** and 2-(dimethylamino)-1-ethanol

IN Gendarme, Jean Philippe; Herbst, Gilles; Riondel, Alain

PA ATOFINA, Fr.

SO Fr. Demande, 13 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2839070	A1	20031031	FR 2002-5438	20020430
	WO 2003093218	A1	20031113	WO 2003-FR1173	20030414
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
			FR 2002-5438	A	20020430

AB A **transesterification** process for the **continuous**  
manufacture of 2-(dimethylamino)ethyl **acrylate** from Et  
**acrylate** and 2-(dimethylamino)-1-ethanol in the presence of a  
**transesterification** catalyst (e.g., tetra-Et titanate) and a  
polymerization inhibitor (e.g., hydroquinone); a process flow diagram is  
presented.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

TI **Transesterification** method for the **continuous**  
production of alkyl (meth)**acrylates** from alcohols and methyl  
(meth)**acrylates**

AN 2003:532627 CAPLUS

DN 139:85788

TI **Transesterification** method for the **continuous**  
production of alkyl (meth)**acrylates** from alcohols and methyl  
(meth)**acrylates**

IN Ackermann, Jochen; Gropp, Udo; Hiltner, Horst; Lausch, Hans-Rolf;

Lunt-Rieg, Ingrid; Siegert, Hermann; Carloff, Ruediger

PA Roehm GmbH & Co. KG, Germany

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003055837	A1	20030710	WO 2002-EP13828	20021206
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,			



LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,  
 PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10200171 A1 20030710 DE 2002-10200171 A 20020104  
 EP 1465859 A1 20041013 EP 2002-799053 20021206  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
 DE 2002-10200171 A 20020104  
 WO 2002-EP13828 W 20021206  
 BR 2002015458 A 20041123 BR 2002-15458 20021206  
 DE 2002-10200171 A 20020104  
 WO 2002-EP13828 W 20021206

OS MARPAT 139:85788

AB A method for the **continuous** production of alkyl (meth)  
**acrylates** (e.g., Bu methacrylate) by the  
**transesterification** of Me (meth)**acrylate** with an alc.  
 (e.g., 1-butanol) having a higher b.p. than methanol is described using  
**azeotropic** distillation for removal of the byproduct methanol and  
 thin-film evaporation for recovery of the alkyl (meth)**acrylate**. A  
 process flow diagram is presented.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Wood's metal as a polymerization inhibitor in the  
**transesterification of acrylate esters**

AN 1966:465537 CAPLUS

DN 65:65537

OREF 65:12209b-d

TI Wood's metal as a polymerization inhibitor in the  
**transesterification of acrylate esters**

IN Zimmt, Werner S.

PA E. I. du Pont de Nemours & Co.

SO 2 pp.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3250781		19660510	US	19631101

GI For diagram(s), see printed CA Issue.

AB A vessel equipped with a stirrer and a fractionating column was charged  
 with 450 parts Me methacrylate, 2 parts Bu<sub>2</sub>SnO, 2 parts p-anilinophenol,  
 and 100 parts Wood's metal. The mixture was brought to reflux with vigorous  
 stirring, small amts. of H<sub>2</sub>O and Me methacrylate were distilled, 50 parts  
 3-(β-hydroxyethyl)spirocyclohexane[2.2]oxazolidine was rapidly added,  
 and the mixture refluxed 5 min. The temperature at the head of the  
 distillation column

was dropped to 65°, removal of the MeOH-Me methacrylate  
**azeotrope continued** 15-20 min., the rate of take-off  
 increased, and the rest of the MeOH removed with some Me methacrylate. In  
 1 hr. the mixture was cooled and decanted from the Wood's metal. Similarly  
 prepared was 3-(2-methacryloyloxyethyl)-2,2-dimethyloxazolidine (I).

L8 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

TI Base-catalyzed reaction of 2-alkylaminoethanols with acrylic and  
 methacrylic esters

AN 1958:15543 CAPLUS

DN 52:15543

OREF 52:2746e-i,2747a-b

TI Base-catalyzed reaction of 2-alkylaminoethanols with acrylic and methacrylic esters  
 AU Sims, Homer J.; de Benneville, Peter L.; Kresge, A. J.  
 CS Rohm & Haas Co., Philadelphia, PA  
 SO Journal of Organic Chemistry (1957), 22, 787-9  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA Unavailable  
 OS CASREACT 52:15543  
 AB Reaction of RNHCH<sub>2</sub>CH<sub>2</sub>OH (I) with CH<sub>2</sub>:CMeCO<sub>2</sub>Me (II) in the presence of (iso-PrO)<sub>3</sub>Al gave H<sub>2</sub>C:CR'CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NHR (III); with 2-tert-alkylaminoethanols it gave the corresponding ester; with less branched 2-alkylaminoethanols, it led to high-boiling mixts., owing to a predominance of amide-forming side reactions. II (100 g.), 0.5 mole I, 6.7 g. bi-β-naphthol (IV) inhibitor, and 1 g. (iso-PrO)<sub>3</sub>Al refluxed and distilled 24 hrs. through a 6 in. Vigreux column with a total reflux-partial take-off stillhead, the MeOH-II azeotrope collected at 65° (stillhead temperature) with distillation temperature kept below 70° and the distillate (80% MeOH) redistd. through a 12 in. packed column gave fractions recorded on the basis of g./100 g. I [I, fraction, weight, b.p., NE (neutralization equivalent weight by acid titration), HE (hydrogenation equivalent weight by quant. hydrogenation), % N given]: Ia (I, R = Me), a, 10 g., b1.0 44-58°, 257, 359, 8.1; b, 22 g., b0.8 58-123°, 495, 141, 7.7; c, 15.9 g., b0.8 123°, 1829, 167, 7.3; d, 20.7 g., b1.0 123-6°, 1735, 150, 7.1; e, 16.0 g., b1.5 126-45°, 831, 135, 7.4; f, residue 83 g. Ib (I, R = Me<sub>2</sub>CH), a, 13.8 g., b28 99-113°, -, -, 11.2; b, 19 g., b28 115°, 221, 285, 9.0; c, 3.5 g., b28 115-55°, -, -, -; d, 30.2 g., b28 155-85°, 821, 257, 6.6; e, 10.0 g., b28 185°, -, -, 6.4; f, residue 70.5 g. Ic (I, R = Me<sub>3</sub>C), a, 19.5 g., b30 105-16°, 165, -, 8.5; b, 20.4 g., b30 117°, 183, -, 7.8; c, 56 g., b30 120°, 185, 198, 7.5; d, 6.0 g., b30 122°, 190, 181, 7.5; e, 11.0 g., b30 122-7°, 242, 155, 5.6; f, residue 19.0 g.; the combined fractions b, c, and d distilled at 117-22°/30 mm. yielded 52-80% IIIa (III, R' = Me, R = Me<sub>3</sub>C) from Ic. Reactions were carried out in essentially the same manner using NaOMe or (Me<sub>3</sub>CO)<sub>4</sub>Ti. Metallic Na used as catalyst was dissolved in Ic prior to the addition of II. Ic (58.5 g.), 86 g. H<sub>2</sub>C:CHCO<sub>2</sub>Me, 7.2 g. IV, and 1 g. (iso-PrO)<sub>3</sub>Al distilled 10 hrs. gave 29 g. fraction, b. 65-78°. Distillation was continued in vacuo and the product (50 g., b13 90-100°) redistd. to give tert-butylaminoethyl acrylate (IIIb) (III, R' = H, R = Me<sub>3</sub>C). H<sub>2</sub>C:CHCO<sub>2</sub>Et (200 g.), 14 g. IV, 173 g. Me<sub>3</sub>CCH<sub>2</sub>CMe<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>OH (cf. Bortnick, et al., C.A. 51, 1117e), and 2 g. (iso-PrO)<sub>3</sub>Al was distilled 21 hrs. to give 53 g. product b. 74-80°, the temperature raised, 74 g. excess H<sub>2</sub>C:CHCO<sub>2</sub>Et collected, and the remainder distilled in vacuo to give 139 g. 2-(1,1,3,3-tetramethylbutyl)aminoethyl acrylate (IIIc) (III, R' = Me, R = C<sub>8</sub>H<sub>17</sub>), b25 140-7°. Similarly, II gave 63% of the corresponding methacrylate (IIId) (III, R' = Me, R = C<sub>8</sub>H<sub>17</sub>), b9 125-32°. Data for the 2-tertalkylaminoethyl esters, III, were tabulated (III, R', R, % yield, b.p./mm., n<sub>25</sub>D, d<sub>25</sub>, NE, HE given): IIIa, Me, Me<sub>3</sub>C, 80, 100-5°/12, 1.4401, 0.9165, 185, 192; IIb, H, Me<sub>3</sub>C, 66, 84-7°/12, 1.4396, 0.9305, 166, 176; IIIc, H, C<sub>8</sub>H<sub>17</sub>, 43, 129-31°/12, 1.4520, 0.9175, 224, 228; IIId, Me, C<sub>8</sub>H<sub>17</sub>, 63, 135-8°/12, 1.4535, 0.9130, 241, 254. IIIa was stable to 6 months storage at 0° and appeared to be considerably more stable than other reported 2-alkylaminoethyl esters. These new monomers could be polymerized in solution or in bulk by heating with a small amount of azoisobutyronitrile initiator. IIIa gave a hard, colorless, transparent polymer under these conditions.

=> logoff hold  
 COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST	ENTRY 28.99	SESSION 29.20
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.65	-3.65

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 10:04:31 ON 24 MAY 2005